11

4. A machine for fabricating a continuous web having angularly disposed wire strands relative to its longitudinal center line from narrow strips cut from a continuous wire-coated narrow width tape having wire strands that are parallel relative to the longitudinal center line of such narrow width tape, comprising a support, said support having a pair of spaced elongated guideways defining guide means, a wire tape index feeding means mounted on said support, said tape index means including a carriage for movement on said support to feed a narrow width tape along said guide means in a direction along the longitudinal center line of the tape a specific distance at definite intervals of time, cutting means having a cutting blade disposed diagonally relative to said longitudinal said wire-coated tape at a bias angle, means operatively connected to said cutting means for actuation thereof to sever a section of tape, a splicing table positioned adjacent to said cutting means for receiving coated wire tape 20 from said feeding means on movement of said tape past said cutting means, first clamp means mounted adjacent to said cutting means and cooperative therewith during actuation of said cutting means to maintain such tape stationary adjacent to said cutting means, splicing means mounted on said table for movement in a direction parallel to said center line of said longitudinal web for splicing a severed section of tape to a previously cut strip of tape which forms said bias wire coated web, said carriage being movable toward and away from cutting means, 30 second clamp means on said carriage, and said second clamp means being operative to move said tape toward said cutting means and operative to move said tape away from said cutting means for a portion of said carriage's movement away from said cutting means to release said 35 tions. tape from adherence to said first clamp means for conditioning said tape for movement onto said splicing table after actuation of said cutting means.

5. A machine for fabricating a continuous web as set forth in claim 1 wherein a tape supply means is located 40 adjacent to said support for supplying wire tape to said index feeding means; said wire tape index feeding means is located between said supply means and said cutting means; said magnetizing means are operatively connected to said splicing table for selective magnetization thereof 45 to position the wire coated tape in a flat condition on said table, said splicing means including a movable plate member having a recess along its leading edge portion adjacent the table for captively engaging said severed tape section, power operated means connected to said 50 plate member for moving said plate member in said direction parallel to said longitudinal center line of said web for moving said tape section into abutting engagement with said strip of bias-cut wire coated web, and means for actuating and deactuating said power operated

6. A machine for fabricating a continuous web as set forth in claim 2 wherein said clamp means comprises a 12

pneumatic cylinder operatively connected to a vertically movable slide member; a fixed blade mounted on said table having a portion thereof in line with said slide member to hold said tape stationary; said fixed blade cooperative with said cutting blade for shearing said wire coated tape; and said tape index feeding means including means for pulling said tape in a longitudinal direction away from said fixed blade to free said tape from said fixed blade prior to movement of said tape in said longitudinal direction onto said table.

7. A machine for fabricating bias cut tire web comprising: support means, supply means mounted adjacent to one end of said support means for supplying tape having strands therein that are parallel to the longitudinal center line of said tape and diagonally relative to said 15 center line of said tape, cutting means mounted adjalongitudinal direction of said feeding means for cutting cent to the other end of said support means having a cutting blade disposed diagonally relative to said longitudinal center line of said tape, power operated means operatively connected to said cutting means for actuation thereof to sever a section of tape, tape index feed means mounted on said support for movement between said supply means and said cutting means, a splicing table positioned adjacent to said cutting means for receiving tape from said support means, said index feed means having drive means connected thereto for intermittently feeding predetermined lengths of tape past said cutting means onto said splicing table, splicing means mounted on said table for splicing a severed section of tape to a previously cut strip of tape, magnetizing means operatively connected to said splicing table for selective magnetization and de-magnetization to thereby flatten and condition the wire coated tape on said table for splicing operation, and take-up conveyor means mounted adjacent to said splicing table for advancing said spliced tape sec-

8. A machine for fabricating a bias cut web as set forth in claim 7 wherein first clamp means are mounted adjacent to said cutting means and cooperative therewith during cutting to maintain said tape stationary adjacent to said cutting means, said index feed means includes second clamp means mounted thereon for movement therewith and for selective actuation to clamp said tape during movement of said index feed means toward said cutting means as well as away from said cutting means wherein clamping of said tape while moving away from said cutting means releases the adherence of said tape from said first clamp means.

References Cited

UNITED STATES PATENTS

3,192,094	6/1965	Phillips et al 156—353
		Beck 156—502X
3 141 805	7/1964	Gough et al. 156-353

PHILIP DIER, Primary Examiner

U.S. Cl. X.R.

156-378, 500, 502